

### **I. Remarks**

Claims 1, 3-5, and 10-19 are pending in the subject application.

Claims 2 and 6-9 have been canceled without prejudice with this response.

Claims 12-19 have been newly added with this response. Support for new claim 12 is found throughout the instant specification and particularly at paragraphs [0089] and original claims 3 and 7. Support for new claim 13 is found throughout the instant specification and particularly at paragraphs [0089], [0272], and original claims 4 and 8. Support for new claims 14 and 17 is found throughout the instant specification and particularly at paragraphs [0100] - [0101] and Examples 1 and 2. Support for new claims 15 and 18 is found throughout the instant specification and particularly at paragraph [0114]. Support for new claims 16 and 19 is found throughout the instant specification and particularly at paragraph [0116] and Example 2. The added claims do not add new matter and Applicant respectfully requests entry of said claims.

Claims 1, 3, 4, 5, and 11 have been amended with this response. Support for the amendment to claim 1 is found throughout the instant specification and particularly at paragraphs [0013], [0014], [0089] - [0091], [0100], [0103], [0113], [0114], [0119] - [0123], [0272], and Examples 1 and 2. Support for the amendment to claim 3 is found throughout the instant specification and particularly at paragraphs [0089] and [0272]. Support for the amendment to claims 4 and 5 is found throughout the instant specification and particularly at paragraphs [0089] and [0272]. Support for the amendment to claim 11 is found throughout the instant specification and particularly at paragraphs [0017], [0089], [0272], and Example 2. Applicant asserts the above amendments clarify the instant claims by rearranging certain claim language and by explicitly providing previously implicit features. They do not change the nature of the instant methods. Therefore, these amendments do not add new matter and respectfully requests their entry.

### **II. Claim rejections under 35 U.S.C. § 112**

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse.

In particular, the Office has concluded that claims 1-10 are indefinite because the relationship between the step of binding serum to the cells or tissue and the remainder of the claim is unclear. Applicants assert that the amendment made to the claims clarifies this feature of the claims and renders this rejection moot.

Claims 1-11 are allegedly indefinite because the comparison step involves a list of genes (list i) compared to a list of data (list ii). Applicants assert that the amendment made to the claims clarifies this feature of the claims and renders this rejection moot.

Claims 1-11 are allegedly indefinite over the phrase "the polypeptide correlating with a phenotype of interest" because this phrase lacks proper antecedent basis. Applicants have amended the claims as suggested by the Office, which renders this rejection moot.

Claims 1-11 are allegedly indefinite over the recitation of "genes differentially expressed in said cells or tissues". Applicants assert that the amendment made to the claims clarifies this feature of the claims and renders this rejection moot.

Claims 2-5 are allegedly indefinite over the recitation of "the gene product" because the phrase lacks proper antecedent basis. Applicants assert that the amendment made to the claims clarifies this feature of the claims and renders this rejection moot.

Claims 4 and 5 are allegedly indefinite because it is unclear as to how the phrase "further comprising the property of molecular weight" further modifies the claims. Applicants assert that the amendment made to the claims clarifies this feature of the claims and renders this rejection moot.

Claims 6-10 are allegedly indefinite because the phrase "the gene product" lacks proper antecedent basis. It is also alleged that it is unclear as to what is meant by properties of the gene product since list (ii) provides polypeptide data but not "properties of the gene product." Applicants assert that the amendment made to the claims clarifies this feature of the claims and renders this rejection moot.

### **III. Claim rejections under 35 U.S.C. § 102**

Claims 1-11 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Tureci et al. (Hybridoma. 1999. 18: 23-28.) The Office has concluded that Tureci et al. teaches a method for

identifying a polypeptide correlating with a phenotype of cancer with the same steps as the instant invention. Applicants respectfully traverse.

Tureci et al. does not anticipate the instant invention because it does not teach step (c) of the instant method. Step (c) of the instant method obtains gene expression profile data for the sample against which the serum antibody is screened. Step (c) then characterizes the genes in the expression profile by characteristics of the gene's product. In contrast, Türeci et al. does not obtain gene expression profiles for the samples against which the serum antibody is screened. No gene expression profiles were obtained for the cells against which the serum antibodies were panned to identify potential antigens, e.g. the XLI MRF bacteria transfected with the recombinant ZAP Express phages. As such, Tureci et al. does not and cannot anticipate the instant invention as claimed. Applicants respectfully request withdrawal of the rejection.